

CLAIMS

1. A control unit for an internal combustion engine that:

detects, using a sensor that is located on a downstream side of a throttle valve on
5 an air intake passage of an internal combustion engine, a quantity of air that is taken into
the internal combustion engine; and

outputs a signal to an injector of the internal combustion engine such that fuel is
injected in accordance with the quantity of air, wherein

a timing of a rise of an air intake in which the quantity of air increases as an
10 intake stroke of the internal combustion engine progresses and a timing of a fall of an air
intake in which the quantity of air decreases as the intake strokes progresses are
determined from the quantity of air and the increases and decrease thereof, and a fuel
injection quantity is calculated by multiplying a predetermined constant by a quantity of
air that is taken in during a period from the timing of the air intake rise until the timing of
15 the air intake fall.

2. The control unit for an internal combustion engine according to claim 1, wherein the
timings of rises in the air intake are when the quantity of air that increases with elapsed
time reaches a predetermined value that is in excess of a quantity that corresponds to a
20 pulse flow or minimal flow of air inside the air intake passage.

3. The control unit for an internal combustion engine according to claim 1, wherein a
cycle of the rises in the air intake is measured.

25 4. The control unit for an internal combustion engine according to claim 2, wherein a

cycle of the rises in the air intake is measured.